RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/570,046_

Source: _1FWP_

Date Processed by STIC: _3/8/06_

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: _10/570,046_   CRF Edit Date: _3/13/06_
Edited by: _n_

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

____ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

____ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

____ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

____ Inserted mandatory headings/numeric identifiers, specifically:

_____

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

✓ Other: _deleted multiple <110>'s_
seqs 1, 3 - corrected amino acid numbering

RAW SEQUENCE LISTING   DATE: 03/13/2006
PATENT APPLICATION: US/10/570,046   TIME: 12:46:04

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\03132006\J570046.raw

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     4 <110> APPLICANT: NAKAMURA, Toshikazu
     5        YOSHIDA, Saho
     6        MATSUMOTO, Kunio
     7        ITAMI, Satoshi
     8        YOSHIKAWA, Kunihiko
W-->  9 <120> TITLE OF INVENTION: SKIN ULCER PREVENTIVE CURATIVE AGENT CONTAINING HUMAN
RECOMBINANT HGF
W--> 10 <130> FILE REFERENCE: K12F1393(US)
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/570,046
C--> 11 <141> CURRENT FILING DATE: 2006-03-01
W--> 11 <160> NUMBER OF SEQ ID: 3
W--> 12 <210> SEQ ID NO: 1
    13 <211> LENGTH: 723
    14 <212> TYPE: PRT
    15 <213> ORGANISM: Homo sapiens
W--> 16 <400> SEQUENCE: 1
    17 Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Leu Gln His Val Leu
    18  1               5                  10                  15
    19 Leu His Leu Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
    20              20                  25                  30
    21 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
    22          35                  40                  45
    23 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
    24      50                  55                  60
    25 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
    26 65                  70                  75                  80
    27 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
    28              85                  90                  95
    29 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
    30              100                 105                 110
    31 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
    32          115                 120                 125
    33 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
    34      130                 135                 140
    35 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
    36 145                 150                 155                 160
    37 Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn Pro Arg
    38              165                 170                 175
    39 Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser Asn Pro Glu Val Arg
    40              180                 185                 190
    41 Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu Val Glu Cys Met Thr
    42          195                 200                 205
    43 Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly
    44      210                 215                 220
```

RAW SEQUENCE LISTING   DATE: 03/13/2006
PATENT APPLICATION: US/10/570,046   TIME: 12:46:04

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\03132006\J570046.raw

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45 Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe
46 225                 230                 235             240
47 Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asn Tyr Cys Arg
48             245                 250                 255
49 Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu Asp Pro His
50             260                 265                 270
51 Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp Asn Thr Met
52     275                 280                 285
53 Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu Cys Ile Gln Gly Gln
54     290                 295                 300
55 Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile Trp Asn Gly Ile Pro
56 305                 310                 315                 320
57 Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu His Asp Met Thr Pro
58             325                 330                 335
59 Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn Tyr Cys Arg Asn Pro
60             340                 345                 350
61 Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr Asp Pro Asn Ile Arg
62         355                 360                 365
63 Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp Met Ser His Gly Gln
64     370                 375                 380
65 Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met Gly Asn Leu Ser Gln
66 385                 390                 395                 400
67 Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp Lys Asn Met Glu Asp
68             405                 410                 415
69 Leu His Arg His Ile Phe Trp Glu Pro Asp Ala Ser Lys Leu Asn Glu
70         420                 425                 430
71 Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His Gly Pro Trp Cys Tyr
72         435                 440                 445
73 Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys Pro Ile Ser Arg Cys
74     450                 455                 460
75 Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu Asp His Pro Val Ile
76 465                 470                 475                 480
77 Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val Asn Gly Ile Pro Thr
78             485                 490                 495
79 Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg Tyr Arg Asn Lys His
80             500                 505                 510
81 Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp Val Leu Thr Ala Arg
82     515                 520                 525
83 Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr Glu Ala Trp Leu Gly
84     530                 535                 540
85 Ile His Asp Val His Gly Arg Gly Asp Glu Lys Cys Lys Gln Val Leu
86 545                 550                 555                 560
87 Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly Ser Asp Leu Val Leu
88             565                 570                 575
89 Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp Phe Val Ser Thr Ile
90             580                 585                 590
91 Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu Lys Thr Ser Cys Ser
92     595                 600                 605
93 Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn Tyr Asp Gly Leu Leu
```

```
 94     610                    615                    620
 95 Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu Lys Cys Ser Gln His
 96 625                    630                    635                    640
 97 His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu Ile Cys Ala Gly Ala
 98                    645                    650                    655
 99 Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp Tyr Gly Gly Pro Leu
100                    660                    665                    670
101 Val Cys Glu Gln His Lys Met Arg Met Val Leu Gly Val Ile Val Pro
102           675                    680                    685
103 Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly Ile Phe Val Arg Val
104           690                    695                    700
105 Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile Leu Thr Tyr Lys Val
106 705                    710                    715                    720
107 Pro Gln Ser
109 <210> SEQ ID NO: 2
110 <211> LENGTH: 2172
111 <212> TYPE: DNA
112 <213> ORGANISM: Homo sapiens
113 <400> SEQUENCE: 2
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115 ctgctcccca tcgccatccc ctatgcagag ggacaaagga aagaagaaa tacaattcat   120
116 gaattcaaaa aatcagcaaa gactaccta atcaaaatag atccagcact gaagataaaa   180
117 accaaaaaag tgaatactgc agaccaatgt gctaatagat gtactaggaa taaaggactt   240
118 ccattcactt gcaaggcttt tgttttgat aaagcaagaa acaatgcct ctggttcccc   300
119 ttcaatagca tgtcaagtgg agtgaaaaa gaatttggcc atgaatttga cctctatgaa   360
120 aacaaagact acattagaaa ctgcatcatt ggtaaaggac gcagctacaa gggaacagta   420
121 tctatcacta agagtggcat caaatgtcag ccctggagtt ccatgatacc acacgaacac   480
122 agctatcggg gtaaagacct acaggaaaac tactgtcgaa atcctcgagg ggaagaaggg   540
123 ggaccctggt gtttcacaag caatccagag gtacgctacg aagtctgtga cattcctcag   600
124 tgttcagaag ttgaatgcat gacctgcaat ggggagagtt atcgaggtct catggatcat   660
125 acagaatcag gcaagatttg tcagcgctgg gatcatcaga caccacaccg gcacaaattc   720
126 ttgcctgaaa gatatcccga caagggcttt gatgataatt attgccgcaa tcccgatggc   780
127 cagccgaggc catggtgcta tactcttgac cctcacaccc gctgggagta ctgtgcaatt   840
128 aaaacatgcg ctgacaatac tatgaatgac actgatgttc ctttggaaac aactgaatgc   900
129 atccaaggtc aaggagaagg ctacaggggc actgtcaata ccatttggaa tggaattcca   960
130 tgtcagcgtt gggattctca gtatcctcac gagcatgaca tgactcctga aaatttcaag  1020
131 tgcaaggacc tacgagaaaa ttactgccga aatccagatg ggtctgaatc accctggtgt  1080
132 tttaccactg atccaaacat ccgagttggc tactgctccc aaattccaaa ctgtgatatg  1140
133 tcacatggac aagattgtta tcgtgggaat ggcaaaaatt atatgggcaa cttatcccaa  1200
134 acaagatctg gactaacatg ttcaatgtgg gacaagaaca tggaagactt acatcgtcat  1260
135 atcttctggg aaccagatgc aagtaagctg aatgagaatt actgccgaaa tccagatgat  1320
136 gatgctcatg gaccctggtg ctacacggga aatccactca ttccttggga ttattgccct  1380
137 atttctcgtt gtgaaggtga taccacacct acaatagtca atttagacca tcccgtaata  1440
138 tcttgtgcca aaacgaaaca attgcgagtt gtaaatggga ttccaacacg aacaaacata  1500
139 ggatggatgg ttagtttgag atacagaaat aaacatatct gcggaggatc attgataaag  1560
140 gagagttggg ttcttactgc acgacagtgt ttcccttctc gagacttgaa agattatgaa  1620
141 gcttggcttg gaattcatga tgtccacgga agaggagatg agaaatgcaa acaggttctc  1680
142 aatgtttccc agctggtata tggccctgaa ggatcagatc tggtttttaat gaagcttgcc  1740
143 aggcctgctg tcctggatga ttttgttagt acgattgatt tacctaatta tggatgcaca  1800
```

```
144 attcctgaaa agaccagttg cagtgtttat ggctggggct acactggatt gatcaactat   1860
145 gatggcctat tacgagtggc acatctctat ataatgggaa atgagaaatg cagccagcat   1920
146 catcgaggga aggtgactct gaatgagtct gaaatatgtg ctggggctga aaagattgga   1980
147 tcaggaccat gtgaggggga ttatggtggc ccacttgttt gtgagcaaca taaaatgaga   2040
148 atggttcttg gtgtcattgt tcctggtcgt ggatgtgcca ttccaaatcg tcctggtatt   2100
149 tttgtccgag tagcatatta tgcaaaatgg atacacaaaa ttattttaac atataaggta   2160
150 ccacagtcat ag                                                        2172
152 <210> SEQ ID NO: 3
153 <211> LENGTH: 728
154 <212> TYPE: PRT
155 <213> ORGANISM: Homo sapiens
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W--> 156 `<400> SEQUENCE: 3`

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157 Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Leu Gln His Val Leu
158  1               5                  10                  15
159 Leu His Leu Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
160              20                  25                  30
161 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
162          35                  40                  45
163 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
164      50                  55                  60
165 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
166  65                  70                  75                  80
167 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
168                  85                  90                  95
169 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
170              100                 105                 110
171 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
172          115                 120                 125
173 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
174      130                 135                 140
175 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
176 145                 150                 155                 160
177 Ser Phe Leu Pro Ser Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr
178                  165                 170                 175
179 Cys Arg Asn Pro Arg Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser
180                  180                 185                 190
181 Asn Pro Glu Val Arg Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu
182              195                 200                 205
183 Val Glu Cys Met Thr Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp
184      210                 215                 220
185 His Thr Glu Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro
186 225                 230                 235                 240
187 His Arg His Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp
188                  245                 250                 255
189 Asp Asn Tyr Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr
190                  260                 265                 270
191 Thr Leu Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys
192          275                 280                 285
193 Ala Asp Asn Thr Met Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu
```

```
194      290              295              300
195 Cys Ile Gln Gly Gln Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile
196 305              310              315              320
197 Trp Asn Gly Ile Pro Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu
198              325              330              335
199 His Asp Met Thr Pro Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn
200              340              345              350
201 Tyr Cys Arg Asn Pro Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr
202              355              360              365
203 Asp Pro Asn Ile Arg Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp
204      370              375              380
205 Met Ser His Gly Gln Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met
206 385              390              395              400
207 Gly Asn Leu Ser Gln Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp
208              405              410              415
209 Lys Asn Met Glu Asp Leu His Arg His Ile Phe Trp Glu Pro Asp Ala
210              420              425              430
211 Ser Lys Leu Asn Glu Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His
212              435              440              445
213 Gly Pro Trp Cys Tyr Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys
214      450              455              460
215 Pro Ile Ser Arg Cys Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu
216 465              470              475              480
217 Asp His Pro Val Ile Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val
218              485              490              495
219 Asn Gly Ile Pro Thr Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg
220              500              505              510
221 Tyr Arg Asn Lys His Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp
222              515              520              525
223 Val Leu Thr Ala Arg Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr
224      530              535              540
225 Glu Ala Trp Leu Gly Ile His Asp Val His Gly Arg Gly Asp Glu Lys
226 545              550              555              560
227 Cys Lys Gln Val Leu Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly
228              565              570              575
229 Ser Asp Leu Val Leu Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp
230              580              585              590
231 Phe Val Ser Thr Ile Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu
232              595              600              605
233 Lys Thr Ser Cys Ser Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn
234      610              615              620
235 Tyr Asp Gly Leu Leu Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu
236 625              630              635              640
237 Lys Cys Ser Gln His His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu
238              645              650              655
239 Ile Cys Ala Gly Ala Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp
240              660              665              670
241 Tyr Gly Gly Pro Leu Val Cys Glu Gln His Lys Met Arg Met Val Leu
242              675              680              685
```

VERIFICATION SUMMARY   DATE: 03/13/2006
PATENT APPLICATION: **US/10/570,046**   TIME: 12:46:05

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\03132006\J570046.raw**

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L:9 M:283 W: Missing Blank Line separator, <120> field identifier
L:10 M:283 W: Missing Blank Line separator, <130> field identifier
L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:11 M:283 W: Missing Blank Line separator, <160> field identifier
L:12 M:283 W: Missing Blank Line separator, <210> field identifier
L:16 M:283 W: Missing Blank Line separator, <400> field identifier
L:113 M:283 W: Missing Blank Line separator, <400> field identifier
L:156 M:283 W: Missing Blank Line separator, <400> field identifier
```

Raw Sequence Listing before editing
(for reference only)

IFWP

delete xtra ([10])'s show only once

```
            RAW SEQUENCE LISTING              DATE: 03/08/2006
            PATENT APPLICATION:  US/10/570,046    TIME: 13:20:02

            Input Set : A:\PTO.KD.txt
            Output Set: N:\CRF4\03072006\J570046.raw

     4 <110> APPLICANT: NAKAMURA, Toshikazu
W--> 5 <110> APPLICANT: YOSHIDA, Saho
W--> 6 <110> APPLICANT: MATSUMOTO, Kunio
W--> 7 <110> APPLICANT: ITAMI, Satoshi
W--> 8 <110> APPLICANT: YOSHIKAWA, Kunihiko
W--> 9 <120> TITLE OF INVENTION: SKIN ULCER PREVENTIVE CURATIVE AGENT CONTAINING HUMAN
RECOMBINANT HGF
W--> 10 <130> FILE REFERENCE: K12F1393(US)
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/570,046
C--> 11 <141> CURRENT FILING DATE: 2006-03-01
W--> 11 <160> NUMBER OF SEQ ID: 3


ERRORED SEQUENCES

W--> 12 <210> SEQ ID NO: 1
     13 <211> LENGTH: 723
     14 <212> TYPE: PRT
     15 <213> ORGANISM: Homo sapiens
W--> 16 <400> SEQUENCE: 1
     17 Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Leu Gln His Val Leu
     18  1               5                  10                  15
     19 Leu His Leu Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
     20              20                  25                  30
     21 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
     22          35                  40                  45
     23 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
     24      50                  55                  60
     25 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
     26 65                  70                  75                  80
     27 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
     28              85                  90                  95
     29 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
     30              100                 105                 110
     31 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
     32          115                 120                 125
     33 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
     34      130                 135                 140
     35 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
     36 145                 150                 155                 160
     37 Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn Pro Arg
     38              165                 170                 175
     39 Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser Asn Pro Glu Val Arg
     40              180                 185                 190
```

p.3

```
41 Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu Val Glu Cys Met Thr
42         195             200             205
43 Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly
44     210             215             220
45 Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe
46 225             230             235             240
47 Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asn Tyr Cys Arg
48             245             250             255
49 Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu Asp Pro His
50             260             265             270
51 Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp Asn Thr Met
52         275             280             285
53 Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu Cys Ile Gln Gly Gln
54     290             295             300
55 Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile Trp Asn Gly Ile Pro
56 305             310             315             320
57 Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu His Asp Met Thr Pro
58             325             330             335
59 Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn Tyr Cys Arg Asn Pro
60             340             345             350
61 Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr Asp Pro Asn Ile Arg
62         355             360             365
63 Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp Met Ser His Gly Gln
64     370             375             380
65 Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met Gly Asn Leu Ser Gln
66 385             390             395             400
67 Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp Lys Asn Met Glu Asp
68             405             410             415
69 Leu His Arg His Ile Phe Trp Glu Pro Asp Ala Ser Lys Leu Asn Glu
70             420             425             430
71 Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His Gly Pro Trp Cys Tyr
72         435             440             445
73 Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys Pro Ile Ser Arg Cys
74     450             455             460
75 Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu Asp His Pro Val Ile
76 465             470             475             480
77 Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val Asn Gly Ile Pro Thr
78             485             490             495
79 Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg Tyr Arg Asn Lys His
80             500             505             510
81 Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp Val Leu Thr Ala Arg
82         515             520             525
83 Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr Glu Ala Trp Leu Gly
84     530             535             540
85 Ile His Asp Val His Gly Arg Gly Asp Glu Lys Cys Lys Gln Val Leu
86 545             550             555             560
87 Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly Ser Asp Leu Val Leu
88             565             570             575
89 Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp Phe Val Ser Thr Ile
```

RAW SEQUENCE LISTING   DATE: 03/08/2006
PATENT APPLICATION: US/10/570,046   TIME: 13:20:02

Input Set : A:\PTO.KD.txt
Output Set: N:\CRF4\03072006\J570046.raw

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 90              580                585                590
 91 Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu Lys Thr Ser Cys Ser
 92         595                600                605
 93 Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn Tyr Asp Gly Leu Leu
 94      610                615                620
 95 Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu Lys Cys Ser Gln His
 96 625               630                635                640
 97 His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu Ile Cys Ala Gly Ala
 98              645                650                655
 99 Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp Tyr Gly Gly Pro Leu
100              660                665                670
101 Val Cys Glu Gln His Lys Met Arg Met Val Leu Gly Val Ile Val Pro
```
E--> 102   675   68ØO   '   685
```
103 Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly Ile Phe Val Arg Val
104      690                695                700
105 Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile Leu Thr Tyr Lys Val
106 705               710                715                720
107 Pro Gln Ser
152 <210> SEQ ID NO: 3
153 <211> LENGTH: 728
154 <212> TYPE: PRT
155 <213> ORGANISM: Homo sapiens
```
W--> 156 <400> SEQUENCE: 3
```
157 Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Leu Gln His Val Leu
158   1            5                10                15
159 Leu His Leu Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
160             20                25                30
161 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
162         35                40                45
163 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
164      50                55                60
165 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
166 65               70                75                80
167 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
168               85                90                95
169 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
170             100               105               110
171 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
172         115               120               125
173 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
174      130               135               140
175 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
176 145               150               155               160
177 Ser Phe Leu Pro Ser Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr
178             165               170               175
179 Cys Arg Asn Pro Arg Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser
180             180               185               190
181 Asn Pro Glu Val Arg Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu
182         195               200               205
```

Input Set : A:\PTO.KD.txt
Output Set: N:\CRF4\03072006\J570046.raw

```
183 Val Glu Cys Met Thr Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp
184     210                 215             220
185 His Thr Glu Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro
186 225                 230             235                 240
187 His Arg His Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp
188                 245             250                 255
189 Asp Asn Tyr Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr
190             260             265             270
191 Thr Leu Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys
192     275             280             285
193 Ala Asp Asn Thr Met Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu
194     290             295             300
195 Cys Ile Gln Gly Gln Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile
196 305             310             315                 320
197 Trp Asn Gly Ile Pro Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu
198             325             330             335
199 His Asp Met Thr Pro Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn
200             340             345             350
201 Tyr Cys Arg Asn Pro Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr
202     355             360         .       365
203 Asp Pro Asn Ile Arg Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp
204     370             375             380
205 Met Ser His Gly Gln Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met
206 385             390             395                 400
207 Gly Asn Leu Ser Gln Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp
208             405             410             415
209 Lys Asn Met Glu Asp Leu His Arg His Ile Phe Trp Glu Pro Asp Ala
210             420             425             430
211 Ser Lys Leu Asn Glu Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His
212     435             440             445
213 Gly Pro Trp Cys Tyr Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys
214     450             455             460
215 Pro Ile Ser Arg Cys Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu
216 465             470             475                 480
217 Asp His Pro Val Ile Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val
218             485             490             495
219 Asn Gly Ile Pro Thr Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg
220             500             505             510
221 Tyr Arg Asn Lys His Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp
222     515             520             525
223 Val Leu Thr Ala Arg Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr
224     530             535             540
225 Glu Ala Trp Leu Gly Ile His Asp Val His Gly Arg Gly Asp Glu Lys
226 545             550             555                 560
227 Cys Lys Gln Val Leu Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly
228             565             570             575
229 Ser Asp Leu Val Leu Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp
230             580             585             590
231 Phe Val Ser Thr Ile Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu
```

RAW SEQUENCE LISTING DATE: 03/08/2006
PATENT APPLICATION: **US/10/570,046** TIME: 13:20:02

Input Set : **A:\PTO.KD.txt**
Output Set: **N:\CRF4\03072006\J570046.raw**

```
232          595                    600                    605
233 Lys Thr Ser Cys Ser Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn
234     610                    615                    620
235 Tyr Asp Gly Leu Leu Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu
236 625                    630                    635                    640
237 Lys Cys Ser Gln His His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu
238                    645                    650                    655
239 Ile Cys Ala Gly Ala Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp
240                    660                    665                    670
241 Tyr Gly Gly Pro Leu Val Cys Glu Gln His Lys Met Arg Met Val Leu
E--> 242     675                    680                    685
243 Gly Val Ile Val Pro Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly
244     690                    695                    700
245 Ile Phe Val Arg Val Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile
246 705                    710                    715                    720
247 Leu Thr Tyr Lys Val Pro Gln Ser
248                    725
```

VERIFICATION SUMMARY   DATE: 03/08/2006
PATENT APPLICATION: **US/10/570,046**   TIME: 13:20:03

Input Set : **A:\PTO.KD.txt**
Output Set: **N:\CRF4\03072006\J570046.raw**

```
L:5 M:280 W: Numeric Identifier already exists, <110> found multiple times
L:6 M:280 W: Numeric Identifier already exists, <110> found multiple times
L:7 M:280 W: Numeric Identifier already exists, <110> found multiple times
L:8 M:280 W: Numeric Identifier already exists, <110> found multiple times
L:9 M:283 W: Missing Blank Line separator, <120> field identifier
L:10 M:283 W: Missing Blank Line separator, <130> field identifier
L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:11 M:283 W: Missing Blank Line separator, <160> field identifier
L:12 M:283 W: Missing Blank Line separator, <210> field identifier
L:16 M:283 W: Missing Blank Line separator, <400> field identifier
L:102 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1
L:113 M:283 W: Missing Blank Line separator, <400> field identifier
L:156 M:283 W: Missing Blank Line separator, <400> field identifier
L:242 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3
```